

WE CLAIM:

1. A system for operating a digital video security system comprising:
a video module for rendering video images captured by a video camera, and
an event scheduling module for generating signals in response to at least one predefined event,
wherein the video module renders said video images in response to a signal generated by the event scheduling module.
2. The system of claim 1, wherein said predefined event includes a triggering event or a scheduling event.
3. The system of claim 2, wherein said predefined triggering event includes motion detection or the activation or deactivation of an appliance.
4. The system of claim 3, wherein said scheduled event includes a preset time for commencing a video recording.
5. The system of claim 4, wherein said video module includes means for recording the video images in a video file.
6. The system of claim 5, wherein said video file comprises a time-indexed representation of said video images.
7. The system of claim 6, wherein the video module comprises database means containing at least one external time index corresponding to at least one portion of said video file, the external time index further corresponding to the at least one predefined event.

8. The system of claim 7 further comprising a communications module for transmitting said video images to a remote computer using streaming technology.

9. The system of claim 1 further comprising a communications module for communicating with a remote computer.

10. The system of claim 9 wherein the remote computer is provided with a video module for rendering video images captured by a video camera, an event scheduling module for generating signals in response to at least one predefined event, and a communications module for communicating with another computer, wherein the remote computer is operable to control the security system.

11. The system of claim 8 wherein the video module further comprises means for motion detection.

12. A system for managing a digital video file associated with a security system, the digital video file comprising time-indexed footage recorded by a video camera, comprising:

a database comprising at least one external time index associated with a predefined event,

means for presenting a list of the predefined events to a user,

means for the user to select one of the list of predefined events,

means for replaying a portion of the video file, the portion of the video file comprising time-indexed footage corresponding to the external time index associated with the predefined event selected by the user from the list of predefined events.

13. The system of claim 10 wherein the video file is replayed at a location remote from the video camera.

14. The system of claim 11 wherein the means for the user to select one of the list of predefined events is at a location remote from the video camera.

15. The system of claim 12 further comprising means for extracting a still image from said time-indexed footage corresponding to the external time index associated with the predefined event.

16. The system of claim 13 wherein the predefined event is a motion detected by the said video camera.

17. A method of detecting motion using a digital video camera comprising the steps of:

(a) receiving a first frame comprising an array of pixels from the video camera;

(b) receiving a second frame comprising an array of pixels from the video camera;

(c) comparing the colour values in each pixel on the second frame against the colour values in the corresponding pixel in the first frame, and if the differences between said first and second frames for all colour values associated with a pixel are greater than a first tolerance value, registering a change in association with that pixel;

(d) comparing the total number of pixels in the second frame for which a change is registered against a second tolerance value, and if said total number exceeds said second tolerance value, registering a motion detection.

18. A method of detecting motion using a digital video camera comprising the steps of:

- (a) calculating average colour differential values for each of an array of pixels from a series of frames previously received from the video camera;
- (b) receiving a first frame comprising an array of pixels from the video camera;
- (c) receiving a second frame comprising an array of pixels from the video camera;
- (d) comparing the colour values in each pixel on the second frame against the colour values in the corresponding pixel in the first frame, and if the differences between said first and second frames for all colour values associated with a pixel are greater than a first tolerance value and greater than the corresponding average colour differential value, registering a change in association with that pixel;
- (e) comparing the total number of pixels in the current frame for which a change is registered against a second tolerance value, and if said total number exceeds said second tolerance value, registering a motion detection.

19. A security system comprising:

- a digital video camera,
 - a host computer operably connected to the camera to receive video images from the camera, and
 - at least one remote computer in communication with the host computer over a network,
- wherein the host computer streams video images to the remote computer in Microsoft Windows Media format.

20. A security system comprising:

- a digital video camera,
- a host computer operably connected to the camera to receive video images from the camera, and

at least one remote computer in communication with the host computer over a network,

wherein the host computer delivers the video images to the remote computer in a streamed video format.

21. The security system of claim 17 wherein the streamed video format is a Microsoft Windows Media system format.
22. The security system of claim 17 wherein the host computer receives video images from the camera in response to a signal generated in response to a predefined event.
23. The security system of claim 19 wherein the predefined event is associated with an event time index and the video images are associated with a series of time indices, and the system further comprises means for identifying a video image with an associated time index matching an event time index.
24. The security system of claim 17 wherein the video images are optionally delivered in near real time to the remote computer or at a time later than the time at which the video images are received by the host computer.
25. The security system of claim 20 wherein the event time index is the time associated with a motion detection.
26. The security system of claim 22 wherein the motion detection is detected by the digital video camera.

27. A method for maintaining surveillance of a surveillance area, comprising the steps of:

(a) providing a host computer with a security system comprising a video module for rendering video images captured by a video camera, an event scheduling module for generating signals in response to at least one predefined event, wherein the video module renders said video images in response to a signal generated by the event scheduling module, and a remote connection module for communicating with another computer over a network;

(b) providing a remote computer connected to the host computer over a network, the remote computer being provided with a security system comprising a video module for rendering video images captured by a video camera and retrieving images captured by a video camera, an event scheduling module for generating signals in response to at least one predefined event, and a remote connection module for communicating with the host computer over the network;

wherein signals generated by the event scheduling module on the remote computer are receivable by the host computer such that the video module on the host computer renders said video images.